

REMARKS

The present invention is entitled to the benefit of a United States Provisional Application No. 60/486,844 filed on July 11, 2003. This document is of record in the United States Patent Office.

Additionally, the present application is entitled to the benefit of its International Application PCT/JP2004/010153 filed on July 9, 2004.

The Office Action rejected Claims 1-14 as being anticipated by *Yahata et al.* (U.S. Patent Publication 2006/0245723). As the Office Action acknowledged, this publication is also representative of the work of two of the present inventors, Mr. McCrossan and Mr. Okada.

Applicant wishes to bring to the attention of the Examiner MPEP §706.02(f)(1). See in particular Example 5 in that section.

In this regard the *Yahata et al.* reference was published in Japanese on June 1, 2005. As such, the Examiner cannot rely upon 35 U.S.C. §102(e). Only the publication date of June 1, 2005 would be available as a prior art publication. Our present invention, however, has the right to claim priority from our provisional application 60-486,844 filed on July 11, 2003, and correspondingly, from the rights from the International Application of June 9, 2004. Both of these dates are earlier than the publication date of June 1, 2005 and it is requested that the *Yahata et al.* reference be withdrawn as prior art.

In reviewing the current claims, applicant has voluntarily presented amendments to refine the technical protection which is sought in the present application.

The present invention belongs to a field of graphics display technology that reproduces a digital stream generated by multiplexing a video stream and a graphics stream.

When reproducing the graphics stream, the reproduction apparatus composes a graphics display based on each of a plurality of display sets contained in the graphics stream. Each display set includes a presentation composition segment and an object definition segment for defining a graphics object. The presentation composition segment includes time information. The time information designates the active period of the presentation composition segment in the display set, on a reproduction time axis of the video stream.

Since the active period is designated by the time information, if the active period of the presentation composition segment belonging to one display set and the active period of the presentation composition segment belonging to its succeeding display set are overlapped, then the graphics display composition processing is pipelined as shown in FIG. 25A.

However, in the case when the active period of the presentation composition segment belonging to one display set and the active period of the presentation composition segment belonging to its succeeding display set overlap each other, the graphics which should be displayed later might be displayed in place of the graphics which should be displayed earlier. Since the original display order of graphics cannot be ensured, a reproduction apparatus capable of processing display sets in parallel cannot make full use of its capability.

In view of this, the present invention is defined by the following technical features.

A recording medium used for storing data, comprising:

a digital stream generated by multiplexing a video stream and a graphics stream, wherein:

the graphics stream includes a plurality of display sets each of which is used for a graphics display;

the display set includes a presentation composition segment and an object definition segment for providing a new graphics object to an object buffer; if an active period of the presentation composition segment in the display set overlaps with an active period of a presentation composition segment in a succeeding display set on a reproduction time axis of the video stream, the display set is able to provide, to the object buffer, a graphics object that is to be referenced by the presentation composition segment in the succeeding display set, if a predetermined condition is satisfied; and the predetermined condition is that the graphics object provided to the object buffer by the display set is not updated to a different graphics object by the succeeding display set.

If it is possible to provide a graphics object without performing an update, then the current display set can provide a graphics object that is referenced by the presentation composition segment in the succeeding display set. This applies to a case where, DSO, DS1, DS2, and DS3 shown in FIGS. 27A to 27C, DSO provides graphics object X that is to be referenced by the presentation composition segment in its succeeding display set (DS1) (page 54, line 8 to page 56, line 7). In detail, the active periods of DSO and DS1 overlap with each other, and DSO provides graphics object X that is to be referenced by the presentation composition segment in DS1. This provision of the graphics object by DSO is based on the precondition that it will not cause updating a graphics object in the object buffer.

As is clear from FIGS. 25A and 27, according to the present invention, a graphics object is provided to the object buffer without updating a graphics object in the object buffer.

Therefore, the object definition segment in the current display set can provide a graphics object that is to be referenced by the presentation composition segment in the succeeding display set.

We believe the technical scope for which protection is sought in the present application is clarified as a result of the above claim amendments.

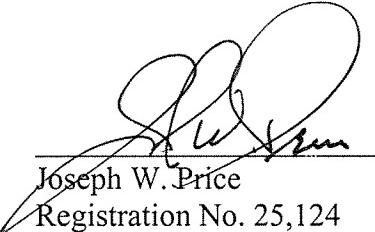
Applicant recently submitted a Supplemental Information Disclosure Statement and would request that it be reviewed in view of the currently submitted claims.

It is believed that the case is now in condition for allowance and an early notification of the same is requested.

If the Examiner has any suggestions or believes that a telephone conference would be of assistance in the prosecution of this matter, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

SNELL & WILMER L.L.P.



Joseph W. Price
Registration No. 25,124
600 Anton Boulevard, Suite 1400
Costa Mesa, California 92626-7689
Telephone: (714) 427-7420
Facsimile: (714) 427-7799